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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/774,758

01/31/2001

Shuta Hamada

KON-1634

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7590

08/26/2004

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EXAMINER

PENDERGRASS, KYLE M

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 08/26/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,758

Applicant(s)

HAMADA ET AL.

Examiner

Kyle M Pendergrass

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicant does not discuss the heat deformation temperature of the bearing in the specification under the load of 18.6Kg/cm².

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Isogai et al. (US Patent No. 5,724,638).

Regarding claim 1, Isogai et al., discloses a fixing apparatus for fixing a toner image on a transfer sheet, comprising: a fixing roller 21 and 71 (Figures 2, 3 & 6) comprising a cylindrical light-transmitting base body capable of transmitting a heat ray (see column 9 lines 1-4, cylindrical core metal 72 having good thermal conductive characteristics. The hollow, cylindrical core metal is capable, as known in the art, of transmitting light because of its reflective properties); a light-transmitting elastic layer (column 9 line 5, plurality of elastic layers) including a first light-transmitting elastic layer

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provided on an outer periphery of said light-transmitting base body (Figure 6, 73a) and made of a material having a hardness A1 (column 9 lines 21-23), and a second light-transmitting elastic layer provided on an outer periphery of said first light-transmitting elastic layer (Figure 6, 73b) and made of a material having a hardness A2 (column 9 lines 21-23); and a heat ray absorbing layer provided on an outer periphery of said light-transmitting elastic layer (figure 6, 74) and to absorb said heat ray (column 6 line 47, release layer 74 is made of PFA, as known and used in the art for heat absorption layers of fixing devices)

Regarding claim 2, Isogai et al., discloses the fixing apparatus of claim 1, wherein the hardness A1 is greater than the hardness A2. It is inherent in the disclosure that the hardness of A1 is greater than the hardness of A2 (column 9 lines 21-23).

Regarding claim 3, Isogai et al., discloses the fixing apparatus of claim 1, wherein the material of at least one of the first light-transmitting elastic layer and the second light-transmitting elastic layer is a silicone rubber (column 8 lines 66-67).

Regarding claim 4, Isogai et al., discloses the fixing apparatus of claim 1, wherein a thickness T1 of the first light-transmitting elastic layer is not larger than a thickness T2 of the second light-transmitting elastic layer. It is inherent in the disclosure that the thickness T1 is not larger than the thickness of T2 (column 9 lines 23-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isogai et al. (US Patent No. 5,724,638), and Mizunuma et al. (Us Patent No. 5,561,511).

Regarding claims 5 & 6, Isogai et al., discloses the fixing apparatus of claim 1, but does not disclose a bearing to support the fixing roller rotatably or an insulating member to intercept heat. However, Mizunuma et al., discloses a bearing 9 & 9' (see Figure 1) to support the fixing roller rotatably, said bearing provided on an outer periphery of said light-transmitting elastic layer or an outer periphery of said heat ray absorbing layer. Mizunuma et al., further discloses a heat insulating member 8 & 8' (Figure 1) to intercept heat transmission from said light-transmitting elastic layer or said heat ray absorbing layer to said bearing, wherein said heat insulating member is provided on an outer periphery of said light-transmitting elastic layer or an outer periphery of said heat ray absorbing layer and said bearing is provided on an outer periphery of said heat insulating member.

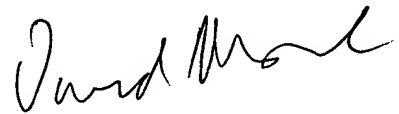
Accordingly it would have been obvious to one skilled in the art at the time of the invention to have used the bearing and heat insulating member of Mizunuma et al., in the fixing apparatus of Isogai et al., because it would have allowed the fixing roller of the fixing apparatus to be rotatably supported as taught by Mizunuma et al., (column 2 lines 59-62).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle Pendergrass whose telephone number is (703) 306-3445. The examiner can normally be reached on Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, David K. Moore can be reached on (703) 308-7452. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application of proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.



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